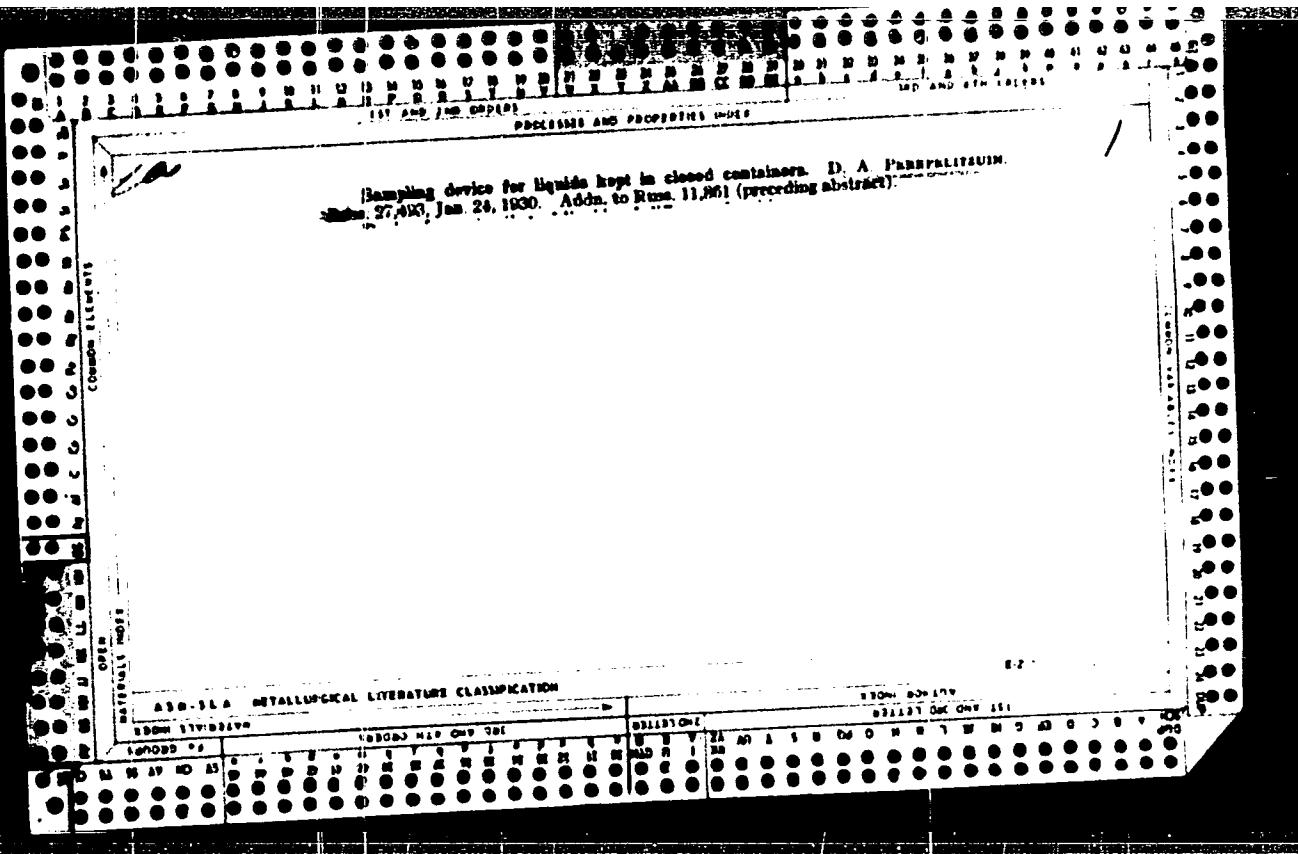


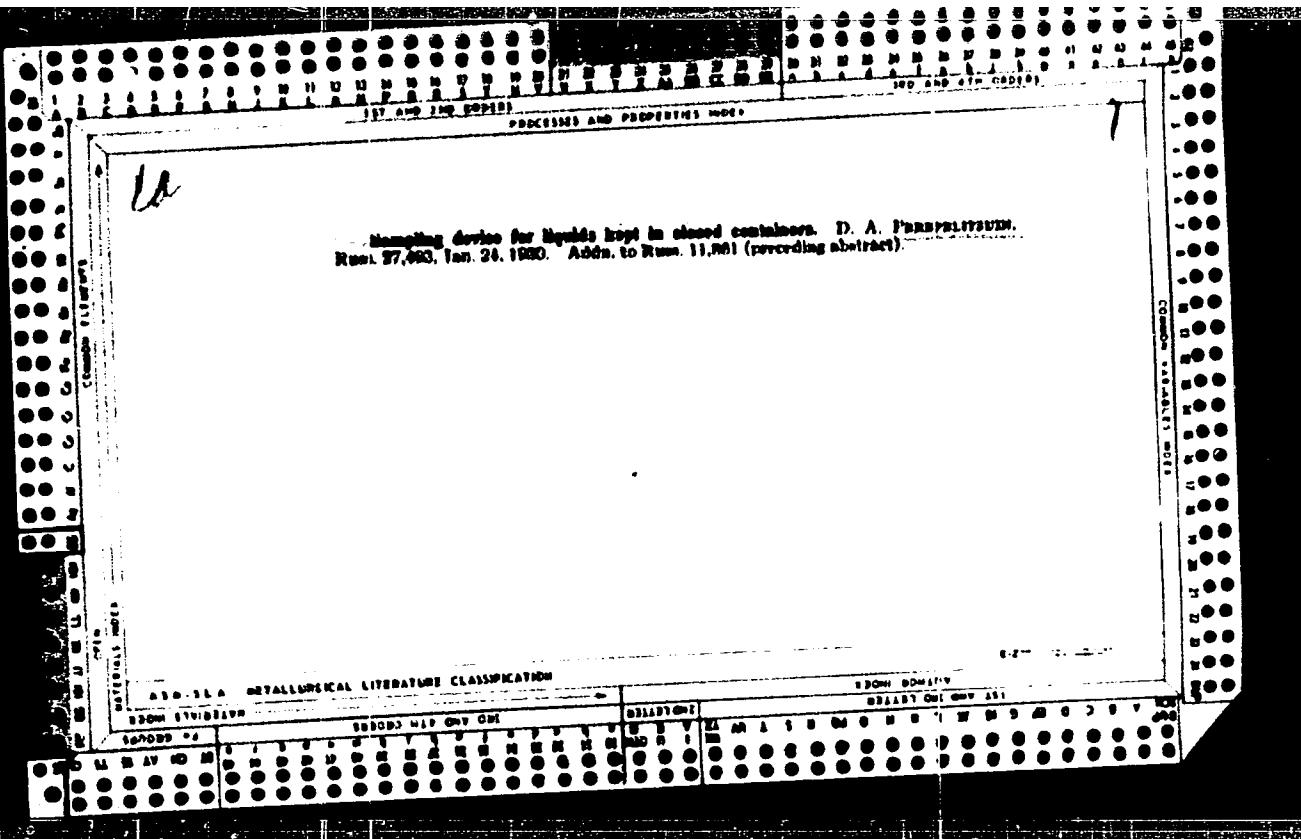
"APPROVED FOR RELEASE: 06/15/2000

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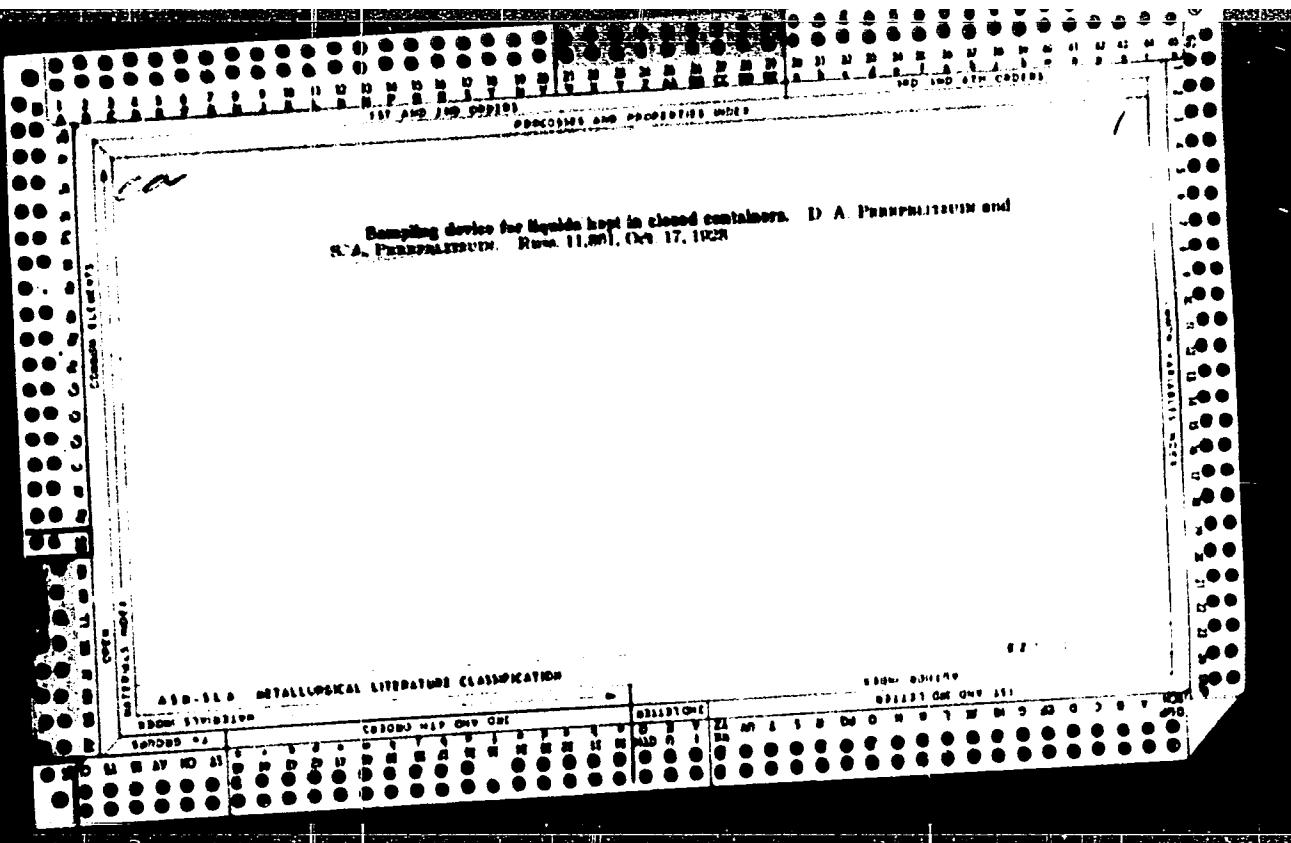
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APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240020002-0"

SOV/91-59-8-18/22

8(5), 9(2)

AUTHOR: Perepelkin, A.M., Engineer

TITLE: A Safe Control Circuit for NK-201 Overhead Traveling Cranes

PERIODICAL: Energetik, 1959, Nr 8, p 27 (USSR)

ABSTRACT: Until recently, the overhead traveling crane NK-201 was operated by a suspended control panel working at 380 volts. Since the control panel is frequently damaged, the operators are exposed to 380 volts. The author developed new 36 volt control circuits for the operation of this crane. A single-phase step-down transformer 380/36 volts of a PMV-1344 magnetic starter was installed on the trolley of the traveling crane. The contact coils were rewound for 36 volts. The electrical circuits are shown in a diagram. The new control system is safe and reliable in operation. In 1958, four overhead traveling cranes of type NK-201 were equipped with low-voltage controls. There is 1 circuit diagram.

Card 1/1

32356
S/190/62/004/001/019/020
B145/B147

IS 8112

AUTHORS: Kozlov, P. V., Asimova, R. M., Perepelkin, A. N.
TITLE: Studies of polycarbonates. IV. Plasticizing of poly-carbonates
PERIODICAL: Vysokonolekulyarnyye soyedineniya, v. 4, no. 1, 1962, 124-129

TEXT: The plasticizing of polycarbonate was studied to ascertain whether the two different types of plasticizing characteristic of cellulose, namely, intrapacket and interpacket plasticizing, are also observable with other high-polymer compounds. Polycarbonate obtained by reaction of 2,2-kis-(4'-hydroxyphenyl)-propane with phosgene (molecular weight about 90,000) was used for the purpose. Dibutyl phthalate, camphor, and butyl stearate were used as plasticizers. Plasticizing was carried out in ampoules at 240-260°C within 2-3 hrs. Tablets were pressed out of the plasticized material at 50 atm and 230-240°C. It has been found thermodynamically that the vitrification temperature T_v is a linear function of the logarithm of plasticizer concentration. The angle of inclination of the straight line in the T_v - log c diagram is greater with the use of

Card. 1/3

32356

Studies of polycarbonates, ...

S/190/62/004/001/019/C20
B145/B147

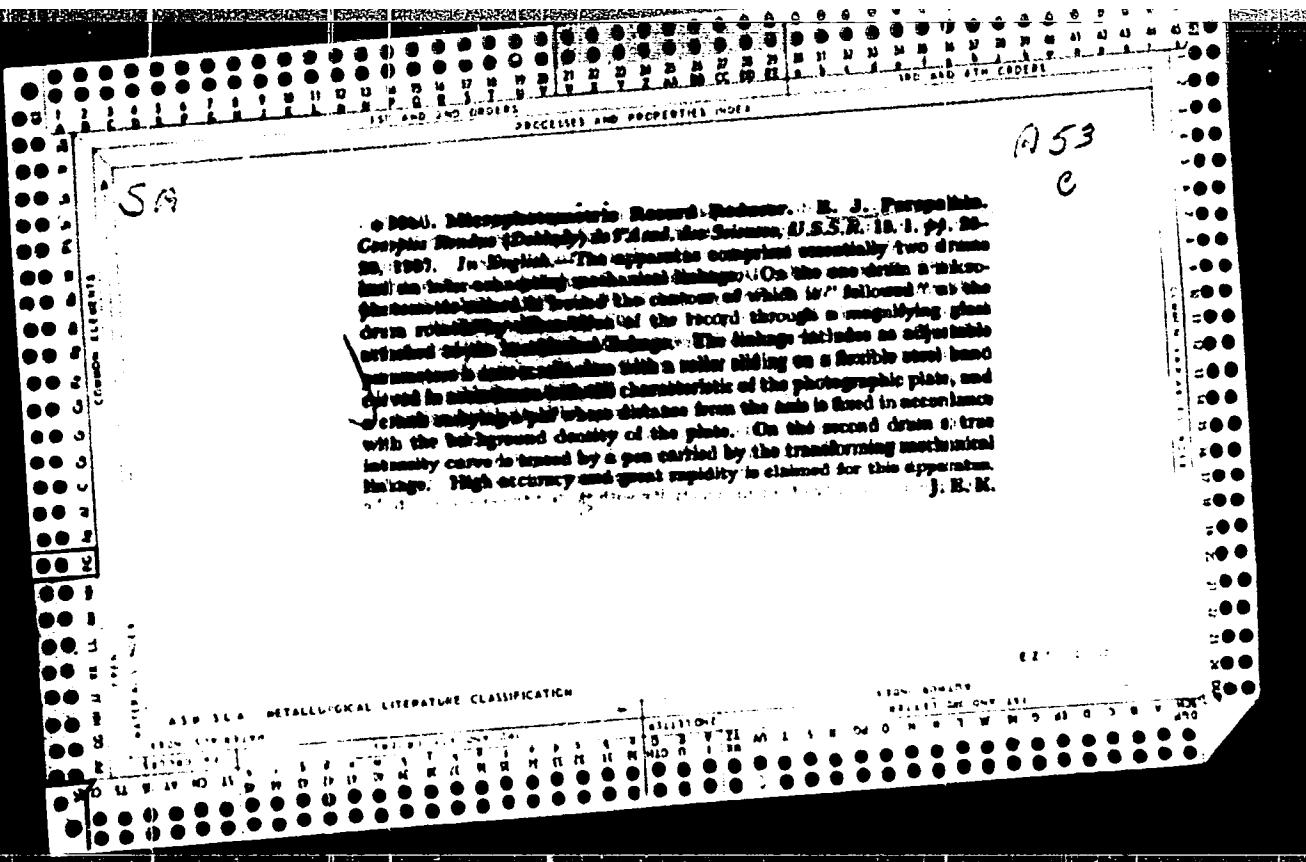
ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: February 10, 1961

Card 3/3

ZAGORUL'KIN, V.; PEREPELKIN, D.

Go deep into economics. Sov. profsoiuzy 17 no. 2:19-20 Ja '61.
(State farms) (Works councils) (MIRA 14:2)



28(5)
AUTHOR:

Perepelkin, K. Ye.

05733
SOV/32-25-10-22/63

TITLE:

Determination of Gas Content in Liquids From the Change in Their
Electrical Conductivity

PERIODICAL:

Zavodskaya laboratoriya, 1959, Vol 25, Nr 10, pp 1210-1212
(USSR)

ABSTRACT:

The amount of gas dispersing or being dissolved must be known in the removal of gases from liquids, in flotation, electrolysis, etc. For determining these gas amounts, a new "conductometric" method was developed which is based on the dependence of the gas content in the liquid (and, thus, its electrical conductivity) on the absolute pressure in the system. Two electrical conductivity determinations are carried out at different pressure (and, thus, different gas content in the liquid), and the gas content in the liquid is computed for standard conditions according to a calibration diagram and an equation. The diagram of the device (Fig 1) shows that the electrical conductivity of the gas-containing liquid is measured in a horizontal glass tube by use of any conductometric device (Ref 5). The liquid to be investigated is brought into the tube

Card 1/2

.....,

J.S.L./Chemistry - Synthetic Fibers A1-13

"Opening the Nitro- α -Oxybutyrate Polymer by Reduction with Tin(II) Chloride, A. S. Sardamal, T. A. and J. L. M. P. P. R., 1971, J. Macromol. Sci. Polym., Chair of Synthetic Fibers.

Chair of Chem. Sci., Vol. 23, No. , pp 13-13 3

Treated -ca resin (I) with sodium, benzyl bromide, and tin(II) chloride obtained two reaction products, one of which was a polymer. The products were also isolated in low yield after dilution and evaporation. The character of the polymerization can be determined to take place in solution according to a polymer.

.....

PEREPELKIN, K. E.

USSR/Chemistry - Macromolecular chemistry

Card 1/1 : Pub. 151 - 9/37

Authors : Shpital'nyy, A. S.; Perepelkin, K. E.; and Meos, E. A.

Title : Process of formation of polyamide resins. Part 4.- The multistage process of formation of polyamide resins and the products obtained from the reaction of ϵ -caprolactam with adipic acid

Periodical : Zhur. ob. khim., 24/3, 447-450, Mar 1954

Abstract : The multistage polymerization process occurring during the formation of polyamides from ϵ -caprolactam was definitely proven by the formation of adipic acid (ϵ -caprolactam reaction products with a molar ratio of 1 : 2 and 1 : 4). The properties of reaction products of different molecular ratio and the solubility of Ag-salt, a reaction product during equimolecular ratio of the basic components, were determined. The presence of benzoic acid in the reaction mixture during its reaction with ϵ -caprolactam is explained. Ten references: 7-USSR; 2-German and 1-USA (1843-1953). Table.

Institution: The Textile Institute, Leningrad

Submitted : July 3, 1953

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240020002-0

To: SA MURKIN, FBI - WASH, D.C. From: SA MURKIN, FBI - WASH, D.C.
Subject: RE: URGENT Date: 10-10-86
Re: RE: URGENT File # 100-100000

Re: RE: URGENT File # 100-100000

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240020002-0"

MEOS, A.I.; MAKAROVA, T.P.; SOROKIN, Ya.Z.; PEREPELKIN, K.Ye.

Cohesion in staple fibers. Tekst. prom. 16 no.8:14-15
Ag '56.

(MLRA 9:10)

(Rayon--Testing)

RE PEREPELKIN, K. Ye.

✓ Effect of degeneration of viscose on its spinning process. 7

K. H. Pirococke and A. J. Moor. *Tessil. Progr.* 16, No. 2, 113 (1958). The effect of degeneration of viscose pulp, carefully studied on a plant scale, was shown to have an important effect on the properties of the yarn. Cf. Müller, *Kunstseide und Cellulose*, 28, No. 10, 382 (1958). E. B.

PM MK

MEOS, A.I.; PEREPELKIN, K.Ye.; SOROKIN, Ya.Z.; ASHKHADZE, B.I.

Apparatus for checking the air content of fluids by the dilatometric
method. Zav.lab. 22 no.5:606-608 '56. (MLRA 9:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna.
(Fluids) (Physical instruments)

AUTHORS: Perepelkin, K.Ye., Serein, Ia.I. 32-1-677

TITLE: The Analysis of Concentrated Sulphurous Gases (Analiz kontsentrirovannykh sveraseleniyashchikh gazov).

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 12, pp. 1414-1417 (USSR)

ABSTRACT: In the introduction it is stated here that the methods hitherto published of the separate determinations of the gas contents: CS₂, COS and H₂S from their mixture are unreliable, which is explained by the fact that these gases react in a similar manner to certain reagents, which renders the determination of their content difficult. Here a number of such works is cited, explaining the disadvantages of the previously suggested methods. Next, it is maintained here that the methods concerned, which are employed in Soviet industrial plants, which, in most cases are based upon the absorption of gases by mineral oils, caoutchouc, or in the corresponding apparatus of "Ors" and "BT" can be described as inaccurate as well as too complicated. Therefore, a more suitable method is suggested here which permits the separate determination of the content of the gases mentioned by means of combustion. The following example is given for this purpose: the artificially obtained amounts of gases CS₂.

Card 1/2

The Analysis of Concentrated Sulphurous Gases

32-12-6/71

COS and H₂S were mixed according to their partial pressure and, for the purpose of analysis, were put into pipettes. H₂S was absorbed by a 5% acetic acid zinc solution and determined iodometrically. This process of absorption was carried out at 60°, as under these conditions CS₂ can be co-absorbed only at the ratio of 1-1.5. COS and CS₂ in the reaction with leaching salt spirit resulted in the following compounds: C₂H₅O, C₂H₅O and C=S

KS KC

In the case of iodometric titration 1 iodine molecule is necessary for every 2 molecules of each of these compounds, and it is therefore possible to conclude the further determination of the contents according to the xanthate method by way of computation. In conclusion the devices are suggested: one for the conservation of H₂S and the other content of CS₂ and COS, and one for the determination of the general sulphurous content in the gas mixture after the oxidation of sulphur with air oxygen. There are 2 figures, 2 tables, and 1 reference, 8 of which are Slavic.

AVAILABLE:

Library of Congress

Card 2/2

1. Gases-Sulfurous concentrated analysis

AUTHOR:

Perepelkin, K.Ye.

32-12-56/71

TITLE:

The Production of Thin-Walled Glass Ampoules (Izgotovleniye steklyannykh tonkostennykh ampul).

PERIODICAL:

Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 12, pp. 1518-1518 (USSR)

ABSTRACT:

In this paper a glass blowing process is suggested for the purpose of producing thin-walled spherical glass ampules going over into a capillary tube of 1.5-3 mm diameter (pipettes). For this purpose the following is suggested here: First, a capillary tube of 1.5-3 mm thickness is drawn in the usual manner from a blow tube when small quantities of the glass liquid are taken up. A part of the capillary tube before the blowhole of the blow tube is left and its end is closed. The flue of the furnace is then partly closed and the end of the blow tube is inserted. A spherical ampule is then blown, and the capillary end remains on it. The glass ampule produced in this manner is filled for calibrating in the following manner: The capillary end is cut and the air is pumped out of the ampule. In this state the ampule is then dipped into the filling liquid, where it is filled immediately; it is then weighed and its contents is reduced to the required quantity, which is brought about by a further

Card 1/2

The Production of Thin-Walled Glass Ampules

32-12-56/71

cutting off of the capillary or by removing the liquid from it.
In order to simplify the removal of the liquid from the capillary
tube, it is recommended to warm the capillary tube up by hand.

AVAILABLE: Library of Congress

Card 2/2 1. Ampoules-Production 2. Glass-Blowing

PEREPELKIN, K.Ye.; NACHINKIN, O.I.

Wet method for the formation of polyvinyl alcohol fibers.
Khim. volok. no.2:19-24 '64. (MIRA 17:5)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna.

5(4)

AUTHOR: Perepelkin, K. Ye. SOV/32-14-11-17, 51

TITLE: Piezometric Method for Determining Dissolved Gases in Liquids (P'yezometricheskiy metod opredeleniya rastvorennykh gazov v zhidkostyakh)

PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 24, Nr 11, pp 1370 - 1373 (USSR)

ABSTRACT: The piezometric method is based upon the fact that the solubilities of difficultly-soluble gases in liquids obey Henry's (Genri) Law at lower pressures. Thermodynamic calculations and experimental results show that in order to avoid an over-saturation it is necessary to add solid, difficultly-wettable particles to the liquid. These serve as centers for the separation of the gas phase. Charcoal and powdered sulfur work best for this purpose. Instead of a visual observation of the gas bubble deposit the dilatometric method was used to determine the dependence of the liquid volume upon the pressure. From the moment that the gas bubble

Card 1/3

Piezometric Method for Determining Dissolved Gases in Liquids SOV/32-24-11-17/17

begins to rise the change in volume is greater than that predicted by the Boyle-Mariotte Law. According to Henry's Law the relative content of dissolved gas

$$\Psi = \frac{P_b}{P_a} \quad (P_a = \text{atmospheric pressure}, P_b = \text{residual pressure})$$

begins to rise the change in volume is greater than that predicted by the Boyle-Mariotte Law. According to Henry's Law the relative content of dissolved gas

(P_a = atmospheric pressure, P_b = residual pressure). The apparatus used in the piezometric determination permits two measurements to be taken simultaneously. The change in volume of the liquid is measured by means of a capillary tube above the liquid container. This volume change is produced by a vacuum maintained over a five minute period, which in turn produces the gas bubbles. The volume change represents graphically the angular change in the verticals in the coordinates,

$$\Delta\theta_5 = f\left(\frac{P_a - P_b}{P_b}\right) \quad \text{In the case that the bedding in the verticals is not sufficiently clear the determination}$$

Card 2/3

Piezometric Method for Determining Dissolved Gases in Liquids SCV/32-24-11-1, 1

must be repeated using larger quantities of powder (sulfur or charcoal). The described method can be used in determinations on foaming, chemically unstable liquids, as, for example, in the control of air removal from viscose liquids. There are 2 figures, 2 tables, and 1 Soviet reference.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut i zhnastvennogo volokna (All-Union Scientific Research Institute for Synthetic Fibers)

Card 3/3

RABINOVICH, V.I.; PEREPELKIN, K.Ye.

Effect of the magnitude of spin-stretching on the physicomechanical properties of "vinol" fibers. Khim. volok. no.2:18-22 '65.

(MIRA 18:6)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna.

1. 21251-66 FMT(m)/EXP(j)/P PM
ACC NR: AP6008399

(A)

SOURCE CODE: UR/0374/66/000/001/0034/0042

S/2

AUTHOR: Perepelkin, K. Ye.

ORG: All-Union Scientific Research Institute of Synthetic Fibers, Leningrad Branch
(Vsesoyuznyy nauchno-issledovatel'skiy institut iskustvennogo volokna, Leningradskiy filial)

15.44.2

TITLE: Certain regularities of elastic properties of oriented fiber forming polymers and fibers. (Report presented at the 14th all-union conference on high-molecular consolidations and their oriented state)

SOURCE: Mekhanika polimerov, no. 1, 1966, 34-42

TOPIC TAGS: polymer, polymer structure, synthetic fiber, elastic stress, material deformation, specific density, elastic modulus

ABSTRACT: An investigation of the results obtained for limit elastic properties of the basic types of chemical fibers, namely the elastic modulus and stress-elongation diagrams, was carried out based on regularities established for the deformation of polymer chains. A method is suggested for calculating the elastic properties of polymers in the state of "ideal orientation" using the correlation between the propagation rate of the elastic deformation pulse and the effective density of polymer chain "skeletons". The values of the elastic modulus of amorphous regions of oriented polymers have been calculated. A comparison of the results of calculation and experimental

Card 1/2

UDC: 678:539.32

N

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4 CIC 74-01

ACC NR: AP6008399

data on elastic properties of fibers is presented. Orig. art. has: 2 figures,
8 formulas, and 4 tables. [Based on author's abstract.] [MT]

SUB CODE: 11/ SUBM DATE: 18May65/ ORIG REF: 013/ OTH REF: 017/

Cond. 2/2 mg5

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240020002-0"

L 34109-66 EWT(m)/EWP(j) RM
ACC NR: AP6012848 (A)

SOURCE CODE: UR/0080/66/039/004/0947/0950

AUTHOR: Utevskiy, L. Ye.; Perepelkin, K. Ye.

28
B

ORG: none

TITLE: Waterproofing and chemical stabilization of products made from polyvinyl alcohol

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 4, 1966, 947-950

TOPIC TAGS: polyvinyl alcohol, maleic acid, CHEMICAL STABILITY, SOLUBILITY

ABSTRACT: The object of the study was to obtain products from polyvinyl alcohol (PVC) which are water-repellent and stable in boiling water and acid by carrying out a single heat treatment without any additional chemical procedure. The experiments were performed on films cast from a solution of PVC (alkaline saponification) containing various amounts of maleic acid (0 - 50% of the weight of PVC, or 0 - 18.83 mole %). The films were dried for 1 hr at 100 - 105°C and were subjected to heat treatment lasting from 2 to 10 min at 220°C. Films thus treated were found to be highly waterrepellent, translucent, and chemically stable. It was shown that by changing the maleic acid content of PVC one can obtain films that are insoluble in boiling water and are either very hydrophilic (absorb up

UDC: 547.361.2-126+620.197

Card 1/2

PEREPELKIN, K.Ye.

Fibers made from polyvinyl alcohol. Khim. volck. no.1:39-49 '62.
(MIRA 18:4)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna.

PEREPELKIN, K.Ye.; SEMENOV, Yu.I.; BASKAKOVA, N.V.

Studying the processes of swelling and washing of polyvinyl alcohol. Khim. volok. no.4(10-14) '61. MIRA 18(4).

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (for Perepelkin). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut steklyanogo volokna (for Semenov, Baskakova).

VOL'F, L.A.; MEOS, A.I.; PEREPELKIN, K.Ye.; UTEVSKIY, L.Ye.

Studying the thermomechanical properties of extra-strong polyvinyl
alcohol fibers in water. Izv.vys.ucheb.zav.; tekhn.tekst.prom. no.5:11-
(MIRA 18:1)
15 '64.

1. Leningradskiy institut tekstil'noy i legkoy promyshlennosti imeni
S.M.Kirova.

PEREPELKIN, K.Ye.; UTEVSKIY, L.Ye.; OLOVA, A.I.: STEFANOVICH, L.P.

Studying the structure of polyvinyl alcohol fibers by the iodine sorption. Khim.volok,no.5:17-19 '4. (MIRA 17:10)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokha.

PEREPELKIN, K.Ye.

Some correlations in the mechanics (hydrodynamics) of the
process of forming of synthetic fibers. Khim. volok. no.3:1-6
'64. (MIRA 17:8)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna.

PEREPELKIN, K.Ye.; RABINOVICH, V.I.

Dry method of forming fibers from polyvinyl alcohol. Khim.
volok. no.3:11-15 '64. (MIRA 17:8)

I. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iakusatvennogo volokna.

BORODINA, O.O.; PEREPALKIN, K.Ye.

Thermal stability of polyvinyl alcohol. Plast.massy no.1: P-11
'64. (MIRA 17:6)

NACHINKIN, C.I.; PEREPELKIN, K.Ye.

Kinetics of the coagulation of aqueous solutions of poly-vinyl alcohol. Khim. volok. no.4:21-24 '63.

(MIRA 16:8)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna.

PEREPELKIN, K. Ye.; UTEVSKIY, L. Ye.

Process of acetylation of fiber from polyvinyl alcohol. Khim.
(MIRA 16:1)
volok. no. 6:7-10 '62.

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'-
skogo instituta iskusstvennogo volokna.

(Textile fibers, Synthetic)
(Vinyl alcohol polymers)
(Acrylation)

PEREPELKIN, K.Ye., kand. tekhn. nauk; PEREPELKINA, M.D.

Synthetic fibers made from polyvinyl alcohol. Tekst. prom. ²³
(MIRA 16:7)
no.6:20-23 Je '63.

1. Nachal'nik laboratorii sinteticheskogo volokna vinol
Leningradskogo filiala Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna (for Perepelkin). 2. Nachal'-
nik laboratorii netkanykh materialov Leningradskogo nauchno-
issledovatel'skogo instituta tekstil'noy promyshlennosti (for
Perepelkina).

(Textile fibers, Synthetic)
(Vinyl alcohol polymers)

PEREPELKIN, K.Ye.

Determining the contamination of spinning solutions by the
slowing of filtration. Khim. volok. no.3:37-41 '63.
(MIRA 16:7)

l. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna.
(Textile fibers, Synthetic)
(Rayon spinning)

NACHINKIN, O.I.; PEREPELKIN, K.Ye.

Formation of polyvinyl alcohol fiber in precipitation baths of
varied composition. Khim.volok. no.1:13-17 '63. (MIRA 16:2)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna.
(Textile fibers, Synthetic) (Vinyl alcohol polymers)

MACHINKIN, O.I.; PEREPELKIN, K.Ye.

Forming of polyvinyl alcohol fibers in organic spinning bathes.
Khim.volok. no.2:12-15 '63. (MIRA 16:5)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna.
(Textile fibers, Synthetic)
(Vinyl alcohol polymers)

NACHINKIN, O.I.; PEREPELKIN, V.Ye.; YUFEREV, N.S.; ZHAROV, V.A.

Microapparatus for the formation of filaments. Khim.volok.
(MIRA 15:11)
no.5:45-46 '62.

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna.
(Spinning)
(Textile fibers, Synthetic)

PEREPELKIN, K.Ye.; BORODINA, O.O.; SHEMKOV, N.K.

Properties of polyvinyl alcohol used in the production of the
"vinol" fiber. Khim.volok no.4:17-20 '62. (MIRA 15:8)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna (for Perepelkin, Borodina).
2. Leningradskiy zavod iskusstvennogo volokna (for Shemkov).
(Textile fibers, Synthetic) (Vinyl alcohol polymers)

TATEVOSYAN, Ye.L.; PEREPELKIN, K.Ye.

Fractional composition of cellulose of various brands according
to the length of fibers. Khim.volok no.4:30-33 '62. (MIRA 15:8)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna.
(Cellulose)

PEREPELKIN, K.Ye.; ARANOVICH, B.S.; KOVIN, P.D.

Two-step oxidation of waste gases from carbon disulfide production.
Khim.volok. no.2:38-40 '62. (MIRA 15:4)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna.
(Carbon disulfide) (Oxidation)

PEREPELKIN, K.Ye.; KONSTANTINOVA, G.V.

Some properties of polyvinyl alcohol concentrated solutions. ihim.-
volok. no.6:19-22 '61. (MIRA 14:12)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna.
(Vinyl alcohol polymers)

PEREPELKIN, K.Ye.; KOZLOVSKAYA, O.V.

Electric conductivity of viscose. Khim.volok. no.6:36-39 '61.
(MIRA 14:12)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna.
(Viscose--Electric properties)

BONODIBA, O.O.; PEREPELKIN, N.Ye.; BROY-KARKE, M.V.

Determination of sodium acetate and other alkaline impurities in
polyvinyl alcohol. Khim.volok. no.6:59-60 '61. (JUN. 1.:12)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna.
(Vinyl alcohol polymers)

LEVIT, R.M.; PEREPELKIN, K.Ye.

Hydrogen sulfide producer. Zav.lab.27 no.3:352-353 '61.
(MIRA 14:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna.
(Hydrogen sulfide)

GEYSHERG, S.M.; SNETKOV, N.V.; MAKAROVA, T.P.; PEREPELKIN, K.Ye.:
TATEVOSIAN, Ye.L.

Adoption of a continuous unit for the mercerization of cellulose. Khim.volok. no.3:51-55 '60. (MIRA 13:7)

1. Leningradskiy zavod iskusstvennogo volokna i Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna. (Leningrad--Cellulose) (Mercerization)

PEREPEL'IN, K.Ye.; SOROKIN, Ya.Z.:

Methods of analyzing for gases produced in the manufacture of
carbon disulfide. Khim.volok. no.5:53-56 '59. (MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna (VNIIV).
(Carbon disulfide)

FEREPELKIN, K.Ye.

Determining the sulfur content of crude carbon disulfide from
its specific gravity. Khim.volok. no.5:56-57 '59. (MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna (VNIIV).
(Sulfur) (Carbon disulfide)

PEREPELKIN, K.Ye.

Determination of the gas content of liquids by changes in
their electric conductivity. Zav.lab. 25 no.10:1210-1212
'59. (MIRA 13:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna. (Gases--Analysis)

PEREPELKIN, K.Y.

Basic processes in the deaeration of viscose. Khim.volok. no.3:
39-43 '59. (MIR 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna (VNIIV). (Viscose)

PEREPELKIN, K.Ye.

Kinetics of phase transfers in the disperse system air - viscose.
Khim. volok. no.2:48-50 '59. (MIRA 12:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna. (Viscose) (Mass transfer)

PEREPELKIN, K. Ye.

Piezometric method of determining gases dissolved in liquids.
Zav.lab. 24 no.11:1370-1373 '58. (MIRA 11:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennoy
volokna. (Piezometer) (Gases--Analysis)

SOV/69-21-2-17/22

5(

AUTHOR: Perepelkin, K.Ye.

TITLE: The Reasons of the Formation and Some Qualities of the Gas-Like Dispersion of Air in Viscose (Prichiny obrazovaniya i nekotoryye svoystva gazovoy dispersii vozdukha v viskoze)

PERIODICAL: Kolloidnyy zhurnal, 1959, Nr 2, pp 226-230 (USSR)

ABSTRACT: This article is a study of the qualities of the system air-viscose through the different phases of viscose production. It is known that the presence of air in viscose, which has been readied for spinning, constitutes one of the major difficulties of viscose fiber spinning. This problem, though it is of great practical importance, has been little studied as yet under the aspect of a dispersed diluted emulsion system of the type gas-liquid. The author's investigation therefore, fills a gap, as he arrives at practical conclusions. In order to determine the measures of the dispersed air particles, the author used the microscopic method. The measuring of the quantity of the air dispersed in the viscose was carried out with dilatometric or con-

Card 1/3

SOV/69-21-2-17/22

The Reasons of the Formation and Some Qualities of the Gas-Like Dispersion of Air in Viscose

ducto-volumetric methods. The author came to the following conclusions: 1) the basic quantity of air particles in industrial viscose have diameters within the range of $(2-6) \times 10^{-5}$ cm; 2) the main source of the presence of air in viscose is the air found in the pores of the xanthogenate particles and in dissolved form in the solvent alkali. In order to diminish this effect in viscose rayon production the cellulose xanthogenate should be dissolved under vacuum; 3) it has been shown under laboratory and industrial conditions, that in the course of time the change in the scattering of the air particles in the viscose is not due to coalescence of the particles, but to processes of molecular transport, the driving force of which is the pressure difference of the gas in bubbles of different size. There are 3 graphs and 16 references, 13

Card 2/3

SOV/69-21-2-17/22

The Reasons of the Formation and Some Qualities of the Gas-Like Dispersion of Air in Viscose

of which are Soviet, 2 English and 1 German.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna, Mytishchi (All-Union Synthetic Fiber Scientific-Research Institute, Mytishchi)

SUBMITTED: July 27, 1958

Card 3/3

RECORDED AND INDEXED BY THE FBI, U.S.A.

SEARCHED, SERIALIZED, INDEXED, AND FILED
MAY 16, 1986 (JL)

UTEVSKIY, L.Ye.; PEREPELKIN, K.Ye.

Thermal treatment of polyvinyl alcohol fibers with a varicus
draft multiplicity factor. Khim. volok. no.5:21-23 '65.
(MIRA 18:10)
1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna.

PEREPEIKIN, M.; LOMANOV, A.

State All-Union Institute of Automotive Transportation in 1962.
Avt.transp. 40 no.1:56 Ja '62. (MIRA 15:1)
(Transportation, Automotive--Research)

PEREPELKIN, M., inzh.; LOMANOV, A., inzh.

Bureau of Technical Assistance helps automotive transportation units. Avt.transp. 38 no.2:17-19 F '60. (MIRA 13:6)
(Transportation, Automotive)

ACCESSION NR: AT4025299

S/0000/63/000/000/0104/0111

AUTHORS: Malykh, L. Ya.; Malykh, N. I.; Perepelkin, N. F.; Utkina, L. A.; Yampol'skiy, Ye. S.

TITLE: Measurement of the diameter of a plasma column by a velocity phase meter

SOURCE: Diagnostika plazmy* (Plasma diagnostics); sb. statey. Moscow, Gosatomizdat, 1963, 104-111

TOPIC TAGS: plasma column, plasma distribution, plasma electromagnetic property, distribution statistics, reflected radiation

ABSTRACT: A procedure is described for measuring the diameter of a reflecting cylindrical plasma surface with density $1.7 \times 10^{13} \text{ cm}^{-3}$ by means of a velocity phase meter. The connection between the phase of the reflected signal and the position of the reflecting surface is established for the instant of time when the density on the axis

Card 1/4

ACCESSION NR: AP4033118

S/0120/64/000/002/0093/0095

AUTHOR: Malykh, L. Ya.; Malykh, N. I.; Perepelkin, N. F.;
Yampol'skiy, Ye. S.

TITLE: Velocity phasemeter for 8-mm band

SOURCE: Pribory i tekhnika eksperimenta, no. 2, 1964, 93-95

TOPIC TAGS: phasemeter, 8 mm band phasemeter, superheterodyne phasemeter,
plasma, plasma density, density phasemeter

ABSTRACT: A velocity superheterodyne phasemeter operating on the 8-mm wavelength is briefly described. It is intended for (a) measuring the time-average density of plasma by the phase of a signal passing through the plasma and (b) observing movements of the critical-density plasma surface by the phase of the reflected signal. The phasemeter error is 7° plus 1.5° or less due to discrepancies associated with the distance between the meter and the plasma

Card 1/2

ACCESSION NR: AP4033118

outfit. Minimum readable phase shift, ~10°; max permissible rate of change of the measurand, 0.2 π rad/microsec; information about the measurand is delivered every two microsec. A block diagram, a circuit diagram of the intensifier-pulse shaper, and a circuit diagram of the sawtooth-voltage shaper are supplied. "L. I. Kompaniyets and G. V. Kubitskiy took part in the development of the phasemeter." Orig. art. has: 4 figures.

ASSOCIATION: Fiziko-tehnicheskiy institut GKAE SSSR (Physico-Technical Institute, GKAE SSSR)

SUBMITTED: 21 May 63 / ATD PRESS: 3073 ENCL: 00

SUB CODE: EC NO REF SOV: 001 OTHER: 001

Card 2/2

I 21563-66 EMT(1)/EPF(n)-2/EMG(m)
ACC NR: AP6008753

LIP(s) AT
SOURCE CODE: UR/0386/66/003/006/0258/0261

AUTHOR: Perepelkin, N. F.

ORG: Physicotechnical Institute, GKAE, Sukhumi (Fiziko-tehnicheskiy institute GKAE)

TITLE: Raman scattering of microwaves by plasma oscillations

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu.
Prilozheniya, v. 3, no. 6, 1966, 258-261

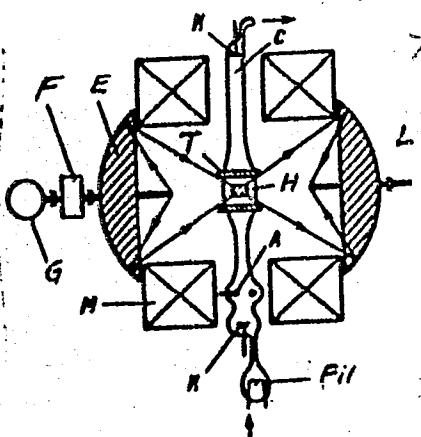
TOPIC TAGS: Raman scattering, Raman spectrum, plasma beam interaction, plasma oscillation, microwave

ABSTRACT: The author reports the results of investigations on the nonlinear interaction of microwaves with a plasma, in which he observed Raman scattering of a 4-mm wave incident from the outside by the natural oscillations of a plasma (electron density $\sim 6 \times 10^{18} \text{ cm}^{-3}$) with emission of a Raman spectrum (frequencies $\omega + \omega_{pe}$) in the 2 mm band. In the experimental setup (Fig. 1), a hydrogen plasma was produced by a direct discharge from cold cathodes in a magnetic field of mirror configuration. The oscillations were excited in the plasma by a theta-pinch loop. Bursts of microwave radiation frequency and of the second harmonic of the plasma frequency. The incident and scattered wave vectors and the magnetic vector were mutually perpendicular. The electric vector of the microwave was parallel to the constant and alternating magnetic vectors. The scattered radiation was received at a wavelength 2 mm by a dc amplifier with 150 Mc video bandwidth. A Raman scattering pulse with amplitude four times the

Card 1/2

I. 21563-66
ACC NR: AP6008753

Fig. 1. Diagram of installation: G - Microwave generator, F - filter, E - focusing system, M - electromagnet, C - chamber (80 mm diameter), T - pinch loop (100 mm diameter), A - anode, K - cathodes, L - microwave load, H - receiving horn.



intrinsic noise level was observed against the background of the intrinsic radiation from the plasma when the instant of development of sufficiently intense oscillations in the plasma fell in the time interval in which the microwave generator was in operation. Arguments in favor of the identification of the observed phenomenon with Raman scattering with emission of a frequency spectrum $\omega + \omega_{pe}$ are presented. Author is grateful to R. A. Demirkhanov, N. I. Malykh, L. A. Utkin, and YE. S. Yampol'skiy for continuous interest and help with the work, and also to S. D. Fanchenko, D. D. Ryutov, and B. A. Demidov for a valuable discussion of the results. Orig. art. has: 3 figures. [02]

SUB CODE: 20/ SUBM DATE: 06/15/00 ORIG REF: 004/ OTH REF: 001/ ATD PRESS:
Card 2/2 4319

PEREPELIKIN, O.V.; KORMEE, V.A.; BAL'YAN, Kh.V.

Synthesis and properties of allene hydrocarbon derivatives.
Part D: Synthesis and properties of alkyl-, alkenyl-, and
alkynylallene alcohols. Zhur. ob. khim. 35 no.6:957-959
Je '65. (MIRA 18:6)

1. Leningradskiy tekhnicheskij institut imeni Lensoveta.

PEREPELKIN, O.V.; CHERKASOV, I.N.; KORMER, V.A., BAL'YAN, Kh.V.

Synthesis and properties of allene hydrocarbon derivatives.
Part 1: Synthesis and properties of alkyl and arylallene
alcohols. Zhur. ob. khim. 35 no.3:574-578 Mr '65.

(MIRA 12:4)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

PEREPELKIN, P.Ya., inzh.

Mechanized gem faceting. Mekh.i avtom.proizv. 17 no.11:24-25 N
'63. (MJRA 17:4)

AUTHOR: Perepelkin, S. SOV-107-58-4-23/57

TITLE: A Reflex Pocket Receiver (Refleksnyy karmannyy priyemnik)

PERIODICAL: Radios, 1958 Nr 4, pp 24-25 and 28 (USSR)

ABSTRACT: The article describes a 2-V-3 pocket reflex receiver consisting of three triode transistors and a diode. The first two transistors act as RF amplifiers and the signal after detection, is returned to them, the transistors now acting as AF amplifier. The resultant AF component is then passed on to the output stage. Selectivity is relatively poor but the receiver is intended only for local reception. Circuit diagram, coil winding data, component values, tuning and alignment methods, and some guidance with constructional details are given. The receiver operates from dry batteries of 10 to 20v. There is 1 circuit diagram, 1 block diagram, 1 table, 1 wiring diagram and 3 drawings.

1. Radio receivers--Design 2. Radio receivers--Performance
3. Radio receivers--Applications

Card 1/1

PEREPELKIN, S. (Leningrad)

Reflex pocket receiver. Radio no. 4:24-25, 28 Ap '58. (MIRA 11:4)
(Radio--Receivers and reception)

PEREPELKIN, S.R.
USSR/Medicine

FD-2469

Card 1/1 Pub 33-20/24

Author Perepelkin, S. R.

Title : Method for denervation of the isolated miniature stomach

Periodical : Fiziol. zhur. 2, 286-287, Mar-Apr 1955

Abstract : Describes method for denervation of the isolated miniature (Pavlov's) stomach. Diagrams. Four references, 2 of them USSR (one since 1940).

Institution: All-Union Institute of Pathology and Therapy of Intoxication, Academy of Medical Sciences USSR, Moscow

Submitted : December 12, 1953

PEREPELKIN, S.R.

Effect of certain radioactive substances on the secretion of the stomach and small intestine [with summary in English]. Med.rad.
3 no.6:16-25 N-D '58. (MIRA 12:1)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta sanitarii i gigiyeny imeni F.P. Erismana.

(RADIUM, eff.

xx radon inhalation on gastric secretion in animals
(Rus))

(POLONIUM, effects,

on gastric & small intestinal secretion in animals
(Rus))

(GASTRIC JUICE,

secretion, eff. of polonium & radon in animals (Rus))

(INTESTINE, SMALL,

secretion, eff. of polonium in animals (Rus))

PEREPELKIN, S.R.

Secretory function of the gastric pouch as affected by different degrees of denervation. Izv. AN SSSR. Ser. biol. no.5:552-561 S-O '58. (MIRA 11:10)

1. Moskovskiy nauchno-issledovatel'skiy institut sanitarii i gigiyeny imeni F.F. Erismana.
(STOMACH--SECRATIONS) (STOMACH--INNERVATION)

PEREPELKIN, S.R.; BONDARENKO, G.I.

Protective role of food in acute radiation injury of the organism.
Med.rad. 4 no.12:53-59 D '59. (MIRA 13:5)

I. Is radiobiologicheskoy laboratorii (zav. - doktor biolog.nauk
S.R. Perepelkin) Moskovskogo nauchno-issledovatel'skogo instituta
sanitarii i gigiyeny imeni P.P. Krisanina.
(RADIATION PROTECTION)
(DIETS)

PEREPELKIN, S.R.

Impaired glucose absorption in the small intestine of dogs following
injury by nuclear fission products of uranium. *Fiziol.zhur.* 45 no.10:
1272-1278 O '59. (MIRA 13:2)

1. Nauchno-issledovatel'skiy institut sanitarii i gigiyeny im. F.F.
Brismana, Moskva.

(GLUCOSE metab.)
(INTESTINE SMALL physiol.)
(URANIUM)

PEREPELKIN, Sergey Romanovich

[Secretion and excretion disorders of the stomach and small intestines in poisoning by radioactive substances] Narushenii sekreteii i ekskretsii zheludka i tonkoi kishki pri ottravleniiakh radioaktivnymi veshchestvami. Moskva, Medgiz, 1960. 185 p.
(MIRA 14:2)

(RADIALTION SICKNESS) (ALIMENTARY CANAL--DISEASES)

PEREPELKIN, S.R.

Changes in conditioned and unconditioned reflexes in rats fed
various diets during radiation injuries. Zhur. vys. nerv. deiat.
11 no.1:171-179 Ja-F '61. (MIRA 14:5)

1. Radiology Department, Erisman Research Sanitary and Hygiene
Institute, Moscow.
(DIET IN DISEASE) (RADIATION SICKNESS)
(REFLEXES)

PEREPELKIN, S.R.

Changes in gastric secretion in peroral administration of radioactive sodium. Med. rad. 8 no.12:38-42 D '63.

(MIRA 17:8)

1. Iz radiobiologicheskoy laboratorii pri kafedre rentgenologii i radiologii I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova i laboratorii akademika A.D. Speranskogo AN SSSR.

ACCESSION NR: AP4042494

S/0103/64/025/007/1096/1100

9

AUTHOR: Perepelkin, S. R. (Khar'kov); Slivnyak, I. M. (Khar'kov)

TITLE: Determining statistical characteristics of the servo of a sum-difference single-pulse radar

SOURCE: Avtomatika i telemekhanika, v. 25, no. 7, 1964, 1096-1100

TOPIC TAGS: sum difference radar, single pulse radar, radar statistical characteristic, radar servo, servo

ABSTRACT: A servo consisting of a measuring device and an integrator is considered. The output signal of the measuring device is of the form:

$$Z = [f_1(e) + f_2(e)] [f_1(e) - f_2(e)],$$

where $f_1(e)$, $f_2(e)$ are the radiation patterns of the antennas. Simple formulas are developed for the average value $M[e(t)]$ and the dispersion $D[e(t)]$ of the error $E(t)$. These quantities depend on the k , σ , β parameters of the system and the

Card 1/2

ACCESSION NR: AP4042494

echo signal only through $x = k_1 \sigma^2 / \beta$ in terms introduced by A. Rosenbloom, et al. (IRE Conv. Record, Pt. 4, Mar55). The method can be generalized to cover the case involving input noise. Orig. art. has: 2 figures and 34 formulas.

ASSOCIATION: none

SUBMITTED: 20 May 63

ENCL: 00

SUB CODE: NO

NO REF SOV: 001

OTHER: 002

Card 2/2

I 42290-65 EWG(j)/EWT(m)
ACCESSION NR: AP5008776

S/0240/65/000/003/1048/0056
10
77
B

AUTHOR: Perepelkin, S. R.

TITLE: Protective role of food and vitamins in radiation sickness

SOURCE: Gigiyena i sanitariya, no. 3, 1965, 48-56

TOPIC TAGS: radiation sickness, ionizing radiation, vitamin, food, radiobiology

ABSTRACT: Diets with various proportions of plant and animal proteins plus vitamins were studied with respect to their effect on the course of radiation sickness in dogs and rats exposed to 350-700 r of whole-body X-irradiation and, in the case of rats, to sublethal doses of whole-body irradiation. The most beneficial diet was that containing milk and eggs. The meat and vivarium diets had the least effect on the course of the pathological process. The addition of vitamins C, P, and those of the B group (B₁, B₂, PP, B₆ and folic acid) mitigated the course of radiation sickness, especially when the physiological (64% meat and 36% milk proteins) and meat (proteins of animal origin) diets were used. The combination of vitamins C, P, and PP had a somewhat weaker effect. Food enriched with vitamins constitutes a major prophylactic and therapeutic measure against radiation sickness, the effect varying

Card 1/2

L 42290-65

ACCESSION NR: AP5008776

with the components of the diet. Orig. art. has: 4 figures; 4 tables.

ASSOCIATION: Radiobiologicheskaya laboratoriya TsNIL I Moskovskogo ordena Lenina meditsinskogo instituta im. I. M. Sechenova (Radiobiology Laboratory, Central Scientific Research Laboratory of the First Moscow Order of Lenin Institute of Medicine)

SUBMITTED: 17Feb64

ENCL: 00

SUB CODE: LS

NO REF Sov: 019

OTHER: 011

PL
Card 2/2

L 7771-66 Enf(m)

ACC NR: AP5025921

SOURCE CODE: UR/0205/65/005/005/0693/0699

AUTHOR: Perepelkin, S. R.

ORG: First Moscow Medical Institute im. I. M. Sechenov (1-y Moskovskiy meditsinskiy institut)

TITLE: Dynamics of gastric secretion and riboflavin in the blood during radiation sickness

SOURCE: Radiobiologiya, v. 5, no. 5, 1965, 693-699

TOPIC TAGS: experiment animal, radiation sickness, irradiation effect, gastroenterology, nutrition, blood, biochemistry

ABSTRACT: Five dogs maintained on a normal diet with a 4 g/kg protein content were studied to determine gastric secretion changes and riboflavin level shifts in the blood during radiation sickness. The five experimental animals with stomachs isolated by Pavlov's method were X-irradiated with a 400 r dose under different conditions to induce acute and subacute radiation sickness and one animal served as a control. The animals were studied for periods up to 81 days. Gastric secretion was measured hourly for a 6 hr period following the ingestion of raw meat used as a strong stimulus or milk used as a weak stimulus according to methods described in an earlier study. Blood analyses

Card 1/2

UDC: 612.014.48

L 7771-66
ACC NR: AP5025921

were made and riboflavin levels of the blood were determined. Findings show irradiation increases gastric secretion in the first phase of acute and subacute radiation sickness. Acute radiation sickness is characterized by gastric hypersecretion at all phases. However, subacute radiation sickness is characterized by wavelike fluctuations with hypersecretion taking place during the first days and hyposecretion at later periods. In all cases gastric secretion disorders were more marked with the use of the strong food stimulus (meat). The relation between indices for gastric secretion and riboflavin levels of the blood is inverse. Hypersecretion is accompanied by reduced riboflavin levels of the blood and hyposecretion is accompanied by increased riboflavin levels. The author suggests that the described dynamics of gastric secretion and riboflavin levels reflect changing oxidation-reduction processes during radiation sickness. Orig. art. has: 3 figures and 1 table.

SUB CODE: 06/ SUBM DATE: 30Dec64/ ORIG REF: 015/ OTH REF: 001

MAR
Card 2/2

PEREPELKIN, Sergey Romanovich; BONDAREV, G.I., red.

[Protective effect of food and vitamins in radiation
lesions of the body] Zashchitnoe deistvie pishchi i vi-
taminov pri luchevykh porazheniakh organizma. Moskva,
Meditseina, 1965. 164 p.
(MIRA 18:12)

PEREPELKIN, S.R.

Characteristics of the disturbance in gastric gland activity
following injection of sodium-24 into the organism. Radiobiologija
(MIRA 18:4)
4 no.5:675-684 '64.

1. Institut vysshey nervnoy deyatel'nosti i neyrofiziologii AN
SSSR i radiobiologicheskaya laboratoriya I Moskovskogo ordena
Lenina meditsinskogo instituta imeni Sechenova.

ANAN'YEV, M.; PEREPELKIN, V.

Spare parts for the human organism?...Yes, they are polymers in
medicine. Tekh.mol. 31 no.4:28-29 '63. (MIRA 16:6)

1. Direktor Nauchno-issledovatel'skogo instituta eksperimental'noy
khirurgicheskoy apparatury i instrumentov (for Anan'yev).
2. Glavnnyy khimik po polimeram Ministerstva zdravookhraneniya
SSSR (for Perepelkin).

(PLASTICS IN MEDICINE)

GIMMEL'FARB, B.M.; MITROFANOV, N.I.; PLEKSEIN, S.V.; STAKHOVSKIY, L.I.

Exploiting phosphorite-bearing Karatau Basin. Kuz. prom. no. 5:
323-328 My '64. (MIRA 1719)

KOKIN, M.K., kand. med. nauk; PERESEKIN, V.I.

Characteristics of association in organic anomalies. Izv. vuz. nauch.-issl. inat. psich. 43:167-171 1965. (Mifn. 12:1)

I. Orlovskaya oblastnaya poiskovaya poliklinika imeni V.P. Tsvetova
(glavnnyy vrach - kand. med. nauk I.E. Kokin).

BLINOVICH, V.I.

Characteristics of the process of comparing visual stimuli in epileptic children. Trudy Gos. nauch.-issl. Inst. psich. i psich.-fiz. 190-197 '65.

I. Orlovskaya psich.-neurologicheskaya bol'ница (chirurg. vrach. M.K.Kokin).

57

* PEREPELKIN, V.P.

Coloring polymerized resins in the finely dispersed state
and the selective adsorption of dyes by synthetic resins.
A. B. Davankov, V. P. Perepelkin, and E. A. Slobodova-
(D. I. Mendeleev Chem.-Tech. Inst., Moscow); *Zhur.
Priklad. Khim.* 24, 68-101 (1951).—Polymers were made by
emulsion polymerization of methyl methacrylate or styrene
or copolymerization of methyl methacrylate and vinyl
acetate, with $(\text{NH}_4)_2\text{S}_2\text{O}_8$ as a catalyst. The polymers
were colored in the form of eq. dispersions by addition of basic
dyes (crystal violet, fuchsin, or methylene blue) to the dis-
persions. The coloring process may result from chem. inter-
action between the basic dye and the acidic polymer. This
conclusion was based on the following observations: (1)
The use of permanganate catalyst produces polymers of acidic
character (1-4 acid groups per polymer mol.). (2) Polymer
is ppnd. on coloration. (3) The colored complex has a high
stability to the action of light and chem. reaction. (4)
The colored polymer dissolves in org. solvents to form colored
solns., even in the case of solvents in which the basic dye
by itself is practically insol.

H. K. Livingston

+ Technological Pictures Lab.

S/081/62/000/011/044/057
E202/E192

AUTHORS: Perepalkin, V.P., and Skundina, F.I.

TITLE: Processing of fluoroplast-4

PERIODICAL: Referativnyy zhurnal, Khimiya, no.11, 1962, 588,
abstract 11 P 42. (In the Symposium: Plastmassy v
mashinostr. ("Plastics in Machinery"), M., Mashgiz,
1959, 117-127).

TEXT: Present technology used in the manufacture of parts from fluoroplast-4 and its shortcomings are described, together with a new technological method which permits to change the existing thermal treatment using hot air for thermal treatment in liquid medium (eutectic mixture consisting of 55% KNO₃ + 45% NaNO₃). The thermal treatment of articles made of fluoroplast-4 was carried out in a metallic bath with external electrical heating. The results of physico-mechanical tests and inspection of the samples showed that optimal conditions for the process should be as follows: temperature at loading and unloading and during thermal treatment, 380 ± 5 °C; duration of heating 0.3-0.5 hours per one mm of thickness of the article.

Card 1/2

85827

S/133/60/000/009/004/01
AC54/A029

18.7530

AUTHORS: Perepelkin, V.P., Engineer and Bogolyubov, V.A., Candidate of
Technical Sciences

TITLE: High Nitrogen Alloys /4

PERIODICAL: Stal', 1960, No. 9, pp. 813-816

TEXT: By applying nitrogen in chromium, chromium-manganese and chromium-nickel alloys, the structure and some mechanical properties of these alloys are improved. As chromium-manganese and its alloys are able to adsorb a considerable amount of nitrogen and form a stable bond with it, they are used to introduce nitrogen into steel by adding them to the steel bath. Several methods to obtain ferro-chromium and ferro-manganese with a high nitrogen content are described: by the alumino-thermic method a ferro-chrome with a nitrogen content of 0.9-1.3 %, by the silico-thermic process (outside the furnace) a nitrogen content of 2 % can be obtained. The introduction of nitrogen by the saturation of solid ferro-chrome shows good results. In this way ferro-chrome of a nitrogen content of 7 % is produced. The best results are obtained with briquets of decarbonized ferrochromium, obtained from the decarbonization of high-carbon ferrochromium by iron ore or other oxidizing agents nitrided in vacuum

Card 1/2

85827

S/133/60/000/009/004/015
A054/A029**High Nitrogen Alloys**

and yielding a nitrogen content even of 8 %. In order to introduce nitrogen into manganese, an apparatus was designed for tests on a semi-industrial scale, producing 70 kg nitrogen-containing manganese (with 4-5 % N) from manganese metal powder, under current and in an atmosphere of technical nitrogen, cleaned previously. The main part of the device is a hermetically sealed tube of stainless steel, with a diameter of 200 mm and 1,200 mm long, revolving at 30 rpm. Manganese powder is fed into the heated zone of the tube at 900°C for 30-60 minutes. The total process takes 2 hours. From all the tests it could be concluded in general, that the dry method for obtaining nitrogen-containing alloys by nitriding are more suitable: they yield alloys with 4-8 % N-content as compared with the 2.5-3 % N-content obtained by the liquid (aluthermic) processes. The solid state process is also more economical, the price of 1 kg N in nitrided decarbonized ferro-chrome (with a 6 % N-content) amounts to 10-15 rubles, in high-nitrogen manganese metal to 15-20 rubles, while in ferro-chrome nitrided by the aluthermic process to as much as 400-500 rubles. The methods of obtaining nitrogen-containing ferro-chrome, (solid and liquid processes), nitrided manganese and nitrogen-containing chromium-manganese alloys, the economic aspects of the processes are described in detail. There are 3 figures and 16 references: 11 Soviet, 3 English, 1 German and 1 Swedish (from the Soviet references three are translations of Japanese, Canadian and Western German patents)

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NOTKIN, Boris Moiseyevich; PEREPELKIN, Vitaliy Petrovich; CHERNOV, Ye.,
red.; PAVLOVA, S., tekhn. red.

[Plastics in engineering] Plastmassy v tekhnike. Moskva, Mosk.
rabochii, 1961. 175 p. (MIRA 14:6)

(Plastics)

S/081/62/000/020/028/040
B160/B144

AUTHORS: Perepelkin, V. P., Skundina, F. I.

TITLE: Manufacture of articles from Ftoroplast-4

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1962, 498, abstract
20P25, (Vestn. tekhn. i ekon. inform. N.-i. in-t tekhn.-ekon.
issled. Gos. kom-ta Sov. Min. SSSR po khimii, 1961, no. 9,
52-53)

TEXT: A new method is suggested for manufacturing articles with complicated shapes from Ftoroplast-4 in order to cheapen their production, raise productivity and cut down waste. The method consists of the following technological operations: tabletting, heat treatment, stamping and drawing in special molds and cooling. The individual operations are described. The quality of the articles obtained fully satisfies the technical requirements
[Abstracter's note: Complete translation.]

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S/117/61/000/011/001/001
A004/A101

AUTHORS: Bocharnikov, N.F., Candidate of Technical Sciences, Perepelkin, V.
P., Skundina, F.I.

TITLE: Dies from zinc alloys

PERIODICAL: Mashinostroitel', no. 11, 1961, 23 - 24

TEXT: The authors point out that, with the increase in the production of plastic articles, the demand for pressure casting dies will rise, and they suggest to produce these dies from zinc alloys, since these alloys have a low melting point and sufficiently high mechanical property indices, while their hardness is not inferior to copper alloys. To test the use of zinc alloys, die seat inserts were produced from pressure-cast zinc alloys. Owing to the high heat conductivity of zinc alloys in comparison with steel, the manufacturing cycle of the part was reduced from 21 to 19 seconds which made it possible to increase the machine output. After 105,000 impressions the die was still in a good condition. Since free casting into metal molds with gaging inserts did not yield positive results, a new process of casting with pressure crystallization on hydraulic presses has been developed. The specific pressure in this process should

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Dies from zinc alloys

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be 1,000 - 1,500 kg/cm². The zinc alloy used had a tensile strength of 35 - 40 kg/mm², a yield limit of 28 - 33 kg/mm² and a Brinell hardness of 130 - 140 kg/cm². The charge consisted of the following materials: Tc-0 (Ts-0) or Tc-1 (Ts-1) grade zinc, A-0 or A-1 aluminum and beryllium bronze waste. The authors present a description of the preparation of the zinc alloy and the casting technology and point out that prior to casting the casting equipment should be heated to 280 - 320°C for which they recommend electric furnaces of the jacket-type. The heating temperature is controlled by chromel-alumel thermocouples and the 9PM-47 (ERM-47) device. During pouring the alloy should have a temperature of 580 - 620°C. After a solidifying layer is appearing on the mold walls, while the center is still in the liquid state, a plunger is placed into the mold, the press rod is lowered and pressure produced. The press should be covered to avoid spattering of the metal. The casting is subjected to pressure up to its complete solidification which generally takes 1 - 3 minutes. The removal of the gaging insert requires the application of considerable forces, therefore it is effected in the vises of a special stripper or under the press with a fixture. The use of dies with inserts from zinc alloys yielded good results and the parts produced are not inferior to those produced in dies with seat inserts from tool steel, hardened, chrome-plated and polished. Owing to the rapid solidification of the

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